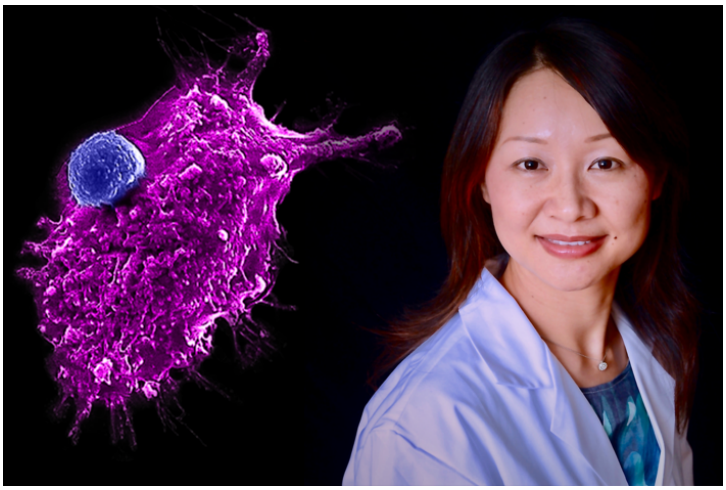
UCLA College Life Sciences

# UCLA scientists make strides toward an 'off-the-shelf' immune cell therapy for cancer







On the left: an engineered HSC-iNKT cell (blue) attacking a human tumor cell • On the right: senior author, Professor Lili Yang

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UCLA researchers have made a critical advance in the development of an "off-the-shelf" cancer immunotherapy. Their findings, published today in *Cell Reports Medicine*, [https://www.cell.com/cell-reports-medicine/fulltext/S2666-3791(21)00317-7#%20] show they have successfully engineered blood stem cells to produce large quantities of normally rare but powerful immune cells, called invariant natural killer T cells. The researchers showed that these engineered (HSC-iNKT) cells can be stored for extended periods, and used safely to treat a wide range of patients with various cancers.

"In order to reach the most patients, we want cell therapies that can be mass-produced, frozen and shipped to hospitals around the world," said senior author, Lili Yang, a professor of microbiology, immunology & molecular genetics [https://www.mimg.ucla.edu/people/lyang/] and a researcher with the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA. [https://urldefense.proofpoint.com/v2/url?u=https-3A__stemcell.ucla.edu_&d=DwMGaQ&c=UXmaowRpu5bLSLEQRunJ2z-YIUZuUoa9Rw_x449Hd_Y&r=O-zsRWbUMO19fbrvs7XpeKYsk4VS0NtSZnlzxgS19VM&m=kmRqQ7B67On0PTRAzYhV_NydZt9UbeG9jKgmzJfHlLY&s=0FRfmIY-udEfbkDTPrkC1kLvbZM_OerFSe9sX3pvecs&e=] This latest report offers great hope for many patients with cancer.

You can read more about the research findings in this press release [https://www.eurekalert.org/news-releases/935142].